

1. Retrieve the total number of orders placed.

	no_of_orders
▶	21338

21338

2. Calculate the total revenue generated from pizza sales.

	total_revenue
▶	817860.05

817860.5

3. Identify the highest-priced pizza.

name	▼	price
The Greek Pizza		35.95

The Greek Pizza – 35.95

4. Identify the most common pizza size ordered.

size	quantities	q_rank
L	18956	1

L : 18956 : 1

5. List the top 5 most ordered pizza types along with their quantities.

name	quantities	q_rank
The Classic Deluxe ...	2453	1
The Barbecue Chick...	2432	2
The Hawaiian Pizza	2422	3
The Pepperoni Pizza	2418	4
The Thai Chicken Pizza	2371	5

6. Find the total quantity of each pizza category ordered

(this will help us to understand the category which customers prefer the most).

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

7. Determine the distribution of orders by hour of the day

(at which time the orders are maximum (for inventory management and resource allocation)).

order_hour	No_of_orders
12	13090
13	12428
18	10718
17	10286
19	8700
16	8370
14	7042
20	6974
15	6340
11	5344
21	5056
22	2740
23	136
10	34
09	8

8. Find the category-wise distribution of pizzas (to understand customer behavior).

category	num_of_types
Supreme	9
Veggie	9
Classic	8
Chicken	6

9. Group the orders by date and calculate the average number of pizzas ordered per day.

avg\_pizzas\_per\_day

277.03

277.03

10. Determine the top 3 most ordered pizza types based on revenue (let's see the revenue wise pizza orders to understand from sales perspective which pizza is the best selling)

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chick...	42768
The California Chick...	41409.5

11. Calculate the percentage contribution of each pizza type to total revenue (to understand % of contribution of each pizza in the total revenue).

name	revenue	total_revenue	percent
The Thai Chicken Pizza	43434.25	817860.05	5.31
The Barbecue Chick...	42768	817860.05	5.23
The California Chick...	41409.5	817860.05	5.06
The Classic Deluxe ...	38180.5	817860.05	4.67
The Spicy Italian Pizza	34831.25	817860.05	4.26
The Southwest Chic...	34705.75	817860.05	4.24
The Italian Supreme...	33476.75	817860.05	4.09
The Hawaiian Pizza	32273.25	817860.05	3.95
The Four Cheese Pizza	32265.70000000065	817860.05	3.95
The Sicilian Pizza	30940.5	817860.05	3.78
The Pepperoni Pizza	30161.75	817860.05	3.69
The Greek Pizza	28454.10000000013	817860.05	3.48
The Mexicana Pizza	26780.75	817860.05	3.27
The Five Cheese Pizza	26066.5	817860.05	3.19
The Pepper Salami P...	25529	817860.05	3.12
The Italian Capocoll...	25094	817860.05	3.07
The Vegetables + V...	24374.75	817860.05	2.98
The Prosciutto and ...	24193.25	817860.05	2.96
The Napolitana Pizza	24087	817860.05	2.95
The Spinach and Fe...	23271.25	817860.05	2.85
The Big Meat Pizza	22968	817860.05	2.81
The Pepperoni, Mus...	18834.5	817860.05	2.3
The Chicken Alfredo...	16900.25	817860.05	2.07
The Chicken Pesto P...	16701.75	817860.05	2.04
The Soppressata Pizza	16425.75	817860.05	2.01
The Italian Vegetabl...	16019.25	817860.05	1.96
The Calabrese Pizza	15934.25	817860.05	1.95
The Spinach Pesto P...	15596	817860.05	1.91
The Mediterranean ...	15360.5	817860.05	1.88
The Spinach Suprem...	15277.75	817860.05	1.87
The Green Garden P...	13955.75	817860.05	1.71
The Brie Carre Pizza	11588.49999999999	817860.05	1.42

12. Analyze the cumulative revenue generated over time.

13. Determine the top 3 most ordered pizza types based on revenue for each pizza category (In each category which pizza is the most selling)

category	name	revenue
Chicken	The Chicken Pesto P...	16701.75
Veggie	The Green Garden P...	13955.75
Supreme	The Brie Carre Pizza	11588.5

## Executive Summary – Pizza Sales Performance Analysis

### Project Objective

This project analyzes historical pizza sales data using SQL to evaluate **overall business performance, customer demand patterns, product profitability, and operational trends**. The objective was to derive actionable insights that can support **pricing strategy, inventory planning, staffing optimization, and revenue growth decisions**.

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### Overall Business Performance

- The business recorded a total of **21,338 orders**, indicating strong and consistent customer demand.
- Total revenue generated from pizza sales amounts to **\$817,860.50**, reflecting a healthy revenue scale for a single-product-focused food business.
- On average, the business sells approximately **277 pizzas per day**, providing a stable baseline for daily inventory planning and operational forecasting.

### Business Interpretation:

The sales volume and revenue figures suggest a mature and steady operation with predictable demand, making it well-suited for optimization rather than demand creation alone.

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### Pricing & Product Insights

- The **highest-priced pizza** on the menu is *The Greek Pizza* at **\$35.95**, representing the premium end of the pricing spectrum.
- The **Large (L) size** is overwhelmingly the most popular, with **18,956 orders**, far exceeding other sizes.

### Business Interpretation:

Customers clearly favor larger-sized pizzas, indicating value-driven purchasing behavior. This opens opportunities for strategic pricing, bundle offers, and margin optimization around large-size products.

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### Customer Preference & Demand Concentration

- The analysis of **top 5 most ordered pizza types** shows that customer demand is concentrated around a limited number of products.

- Category-wise quantity analysis highlights that certain pizza categories dominate overall order volume, reflecting strong customer preference patterns rather than evenly distributed demand.

#### **Business Interpretation:**

A small subset of pizzas drives a large share of total orders. These high-demand items should be prioritized for inventory availability, consistent quality, and promotional visibility.

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#### **Revenue Contribution Analysis**

- Revenue-based ranking reveals the **top 3 pizza types by total revenue**, which may differ from the highest-quantity pizzas.
- Percentage contribution analysis shows that not all frequently ordered pizzas are the strongest revenue drivers.

#### **Business Interpretation:**

Revenue performance is influenced by both price and quantity. High-revenue pizzas deserve focused marketing and positioning, while low-revenue, low-demand items may be candidates for redesign or removal.

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#### **Time-Based & Operational Insights**

- Hourly order distribution analysis identifies clear **peak ordering hours**, providing critical input for staffing, kitchen throughput, and inventory readiness.
- Cumulative revenue analysis shows steady revenue growth over time, indicating consistent customer engagement rather than irregular or seasonal spikes.

#### **Business Interpretation:**

Understanding peak hours allows the business to align labor and inventory more efficiently, reducing operational costs while maintaining service quality.

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#### **Category-Level Performance**

- Category-wise distribution highlights differing customer behavior across pizza categories.
- Within each category, identifying the **top 3 pizzas by revenue** reveals which products contribute the most financial value inside each segment.

### **Business Interpretation:**

Category-level insights support targeted strategies instead of generic promotions, enabling better category management and focused revenue optimization.

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### **Key Business Takeaways**

- The business operates at a **high-volume, steady-demand level**, making optimization more impactful than expansion alone.
  - Large-sized pizzas are the dominant customer choice, representing a strong lever for revenue growth.
  - Revenue drivers are not always the most ordered items, reinforcing the need for revenue-focused decision-making.
  - Time-based demand patterns enable smarter staffing and inventory planning.
  - Product and category concentration allows for menu simplification and operational efficiency gains.
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### **Conclusion**

This SQL-driven analysis successfully translates raw transactional data into **clear, actionable business insights**. The findings provide a strong foundation for improving pricing strategy, inventory management, operational efficiency, and product prioritization. The project demonstrates how structured querying and analytical thinking can directly support real-world business decision-making.